

***Anopheles* Adult Food**

10% v/v corn syrup and 10% w/v sucrose, and dilute honey are common sugar sources for adult male and female mosquitoes. These can be provided from soaked cotton balls lying on top of a cage, but in this case, ensure that the mesh is non-absorbent (e.g. nylon rather than cotton).



MR4 feeds adult mosquitoes by hanging a modified inverted sample vial (Fisherbrand Polystyrene Sample Vial (20ml) Cat. No. 03-341-13) in the cage. A hole has been punched in the cap to allow mosquitoes access to the soaked sugar pad. The vial hangs from a bent wire inserted into the vial base by heating the wire and forcing it through the molten plastic base. This orientation has the advantage that *Anopheles* will seldom lay eggs in it, and it will remain moist for 1 week without attention. Two large cotton balls are soaked in a 10% w/v baking sugar in water solution and then placed in the vial. Vials and sugar are changed every week to ensure that the sugar is moist enough and to prevent mold growth.

Sugar Vials and covers are bleached in between use and stored in a closed container to prevent mold spores from accumulating on them. Sugar water is made on a weekly basis as microbes begin to accumulate as soon as the solution is made. The water is stored in the refrigerator during the week.

Cleanliness is of utmost importance when dealing with the sugar water and cotton balls. Once a bag of cotton balls is opened, mold spores can settle on them immediately. Cotton balls can be sterilized by autoclaving and stored in sealed containers.

Females are typically blood fed only once in their lifetime, between 3 and 7 days post-emergence, see rearing schedule.